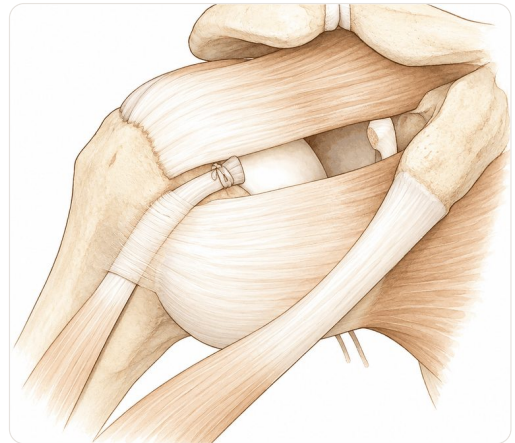


Biceps Tenodesis

The long head of the biceps tendon — anchored at the top of the glenoid and a common pain source addressed by tenodesis.

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At-a-glance recovery. Pooled from 85 published studies — your own pace will vary.

LIGHT DUTIES	MOST EVERYDAY ACTIVITIES	FINAL OUTCOME PLATEAU
desk work, driving, daily tasks	manual work, sport, gym	pain and strength
2-6 weeks	5-8 months	13 months
Patients can typically return to desk work and light activities within 2 to 6 weeks, with the sling worn for about 3 to 4 weeks.	Most patients achieve clinically significant outcomes and return to previous activity levels between 5 and 8 months postoperatively.	Clinically significant outcomes are typically attained by 13 months postoperatively, with full plateauing of function.

Why this operation has been suggested

Dr Kieran Hirpara, an upper-limb surgeon at Mater Private Hospital Rockhampton, starts with the least invasive options that suit your condition. Patients are generally referred to our clinic by their GP; if a physiotherapist has suggested you see us, you will still need a referral from your GP in order to be eligible for the Medicare rebate. At your appointment we take a history, examine your shoulder, and arrange imaging if it is needed to work out what is causing your pain.

Biceps tenodesis is an operation that reattaches the long head of the biceps tendon, the tendon at the front of your shoulder, to a new spot on the arm bone. We usually suggest it when simpler treatment such as activity change and physiotherapy has not given you enough improvement, or when you are already having another shoulder operation and the biceps tendon is part of the problem. Most people reach a meaningful improvement between 5 and 8 months after the operation, and by 13 months the results are steady. The aim is to relieve your pain and help your shoulder work normally again.

Before the operation

Before your operation, we plan it around imaging such as X-ray, MRI or ultrasound, which we may have already arranged at your first visit. In the week before surgery, you will get clear instructions from our team. You will need to stop eating and drinking seven hours before your operation. We ask for seven hours rather than a shorter time so your surgery can be brought forward if the theatre list runs early. Tell us about all the medicines you take, including any blood thinners, and bring a written list with you on the day. Some medicines need to be paused before surgery, and we will tell you which ones and when. Arrange for someone to drive you home afterwards. Wear loose, comfortable clothing. If you have other medical conditions, you may need blood tests or a review with the anaesthetist, the doctor who gives your anaesthetic, but most people do not need either.

On the day

On the day of your operation, you come to the hospital's surgical admissions unit. Our team checks you in and gets you ready for theatre. The anaesthetist will meet you before the operation and talk you through both parts. This operation is done under general anaesthetic combined with a regional nerve block. You are then taken into the operating theatre, where the operation is performed.

When the operation is finished, you wake up in the recovery area. Nurses watch over you there while the anaesthetic wears off. Once you are stable, you either go to a ward or go home, depending on the operation you had and how your recovery is going.

What the operation involves

This is a keyhole operation. Your surgeon makes a few small cuts around your shoulder, including one at the back, and works with a small camera inside the joint. Through these cuts, the surgeon finds the long head of the biceps tendon, the tendon at the front of your shoulder that has been causing your pain.

The surgeon releases the damaged tendon from its worn spot and reattaches it to a new place lower down on the arm bone. It is held there with a small anchor or screw placed into the bone. This gives the tendon a fresh, healthy spot to heal onto, a bit like moving a frayed rope to a stronger part of the post. The tendon stays attached to the bone, so the biceps muscle keeps its shape and strength.

If you are having another shoulder operation at the same time, such as a rotator cuff repair, the biceps work is done through the same keyhole cuts while you are already in theatre. Your surgeon will talk this through with you beforehand.

At the end, the instruments come out and the small cuts are closed with stitches. The stitches sit under a dressing, which our team will look after with you. You will go home with written instructions about your dressing and your first few days.

The exact way the tendon is fixed can vary, and your surgeon chooses the method that suits your shoulder and your situation. What does not change is the goal: the sore part of the tendon is taken out of the joint and anchored to solid bone, so it can settle down and stop hurting.

After the operation

Most patients stay one night in hospital after this operation, though some are able to go home the same day. You will wake up in the recovery ward, where nurses keep an eye on you and give you medicine to keep you comfortable. Your arm rests in a simple sling for support, which comes off for washing and exercises. Please arrange for someone to stay with you for the first 24 hours. We leave the dressing on for about 10 days; please do not take it off before then unless we tell you to. We change or remove it when we see you. You can move around the house from day one, but no driving for at least six weeks. Once your surgeon clears you, typically at the six-week review, you can drive again. See [Driving after upper-limb surgery](#) for details.

Recovery

For the first few days your shoulder will be sore and may feel swollen. This settles over the following weeks. Pain medicine, rest and ice help keep you comfortable. Your arm rests in a simple sling, which comes off for washing and for your exercises.

You can move around the house from day one. Your physiotherapist will guide you through gentle movements at first, then build up your strength as the tendon heals. Strengthening that loads the biceps, such as bending the elbow against resistance or lifting with the arm straight out in front, waits until the tendon has healed firmly. Once your surgeon clears you, typically at the six-week review, you can drive again. See [Driving after upper-limb surgery](#) for details.

Light daily tasks come back first. You will notice the pain easing as weeks pass, and everyday movements like dressing and reaching become easier. Heavier work, sport and gym activity return later, once your strength and movement have built up and your physiotherapist and surgeon are happy with your progress. Sleep can be uncomfortable at first; sleeping propped up in a chair or on your back often helps until the shoulder settles.

Recovery varies from person to person. Your timeline may differ, and your surgeon and physiotherapist will guide you at each step.

What can go wrong

Most patients do well, but problems can occasionally happen. Your surgeon and the team monitor you closely to spot any issue early.

Infection is a risk with any operation. You might notice redness that spreads out from the wound, fluid or pus leaking from it, or a fever. Call the clinic the same day if this happens. Most wound infections settle with wound care or antibiotics, but a few need further treatment.

Nerves run close to the operating area, so a nerve can be irritated during surgery. This can feel like numbness, tingling or weakness in the arm or hand. Some numbness and weakness in the first 24 hours after your nerve block is expected and normal. Once the block has worn off, at about 24 hours, call the clinic if your arm, hand or fingers stay numb, or if you cannot move them.

The shoulder can become stiff after this operation. You might find it hard to reach up, behind your back or out to the side, and movements may feel tight or blocked. Bring this up at your next review, as early movement with your physiotherapist helps loosen it.

The screw or anchor holding the tendon can occasionally cause a problem. The tendon can be damaged where it is held, or the repair can fail, which may feel like a sudden pop, new weakness when bending the elbow, or the biceps balling up near the front of your shoulder. The bone of the upper arm can also rarely break near where the implant sits, which causes sudden severe pain, swelling and a change in the shape of the arm. Go to the emergency department if your arm changes shape suddenly or you cannot use it at all. For a pop or new weakness, call the clinic.

Some people keep having pain at the front of the shoulder, or cramping in the biceps muscle, even after healing. Mention this at your review. If pain continues, a further operation is sometimes needed.

The complications table on this page lists typical rates if you want the specifics.

When to call us

Most problems show up in the first few weeks. Knowing what to watch for helps you act early.

Go to the emergency department if you have swelling or pain in your calf, or shortness of breath or chest pain. These can be signs of a blood clot. Go also if your fingers or hand turn pale, cold, white, blue or dark, or if your arm changes shape suddenly and you cannot use it at all.

Call the clinic the same day if you have a fever, spreading redness around the wound, or fluid or pus leaking from it. Call the same day too if pain keeps getting worse despite your pain medicines.

Some numbness and weakness in the first 24 hours after your nerve block is expected and normal. Once the block has worn off, at about 24 hours, call the clinic if your arm, hand or fingers stay numb, or if you cannot move them.

If you cannot reach the clinic, out of hours or on a weekend, go to your nearest emergency department.

Where to read more about the condition

This page is about the operation itself. The condition it treats, including what the evidence shows about when surgery helps and when it does not, is covered in more detail on the [Biceps Tendinopathy and Long-Head Rupture](#) page.

Biceps Tenodesis

Complication rates from published literature

Pooled from 85 published studies. These are population-level rates, not your individual risk — your surgeon will discuss what applies to you.

COMPLICATION	REPORTED RATE	NOTES
reoperation	<18%	Reoperation rates vary widely, with biceps tenodesis generally showing lower rates (0-6%) compared to SLAP repair (3-15%).
fixation failure	<13%	Failure of the tenodesis construct or tendon retraction occurs in a small percentage of patients, varying by fixation method.
hematoma	<10%	Hematoma formation is reported in some cohorts, though rarely requiring surgical intervention.
bicipital pain	5-17%	Persistent pain or cramping in the bicipital groove is a common complication, particularly after tenotomy or in specific fixation groups.
stiffness	3-26%	Postoperative stiffness requiring intervention (LOA/MUA) is reported, with higher rates noted in arthroscopic suprapectoral techniques.
infection	<2%	Superficial infection rates are low (0-2%), with deep infections being rare.
pop-eye deformity	1-23%	Incidence varies significantly by fixation technique and patient population, ranging from 1.0% to 23.0%.
nerve injury	<1%	Transient nerve injuries or neurapraxias occur in less than 1% of cases.
wound complications	<1%	Superficial wound issues such as erythema or dehiscence are uncommon.

I have read this information and have had the opportunity to ask Dr Hirpara questions about the procedure, its expected recovery, and the complications listed above.

PATIENT – PRINT NAME	SIGNATURE	DATE